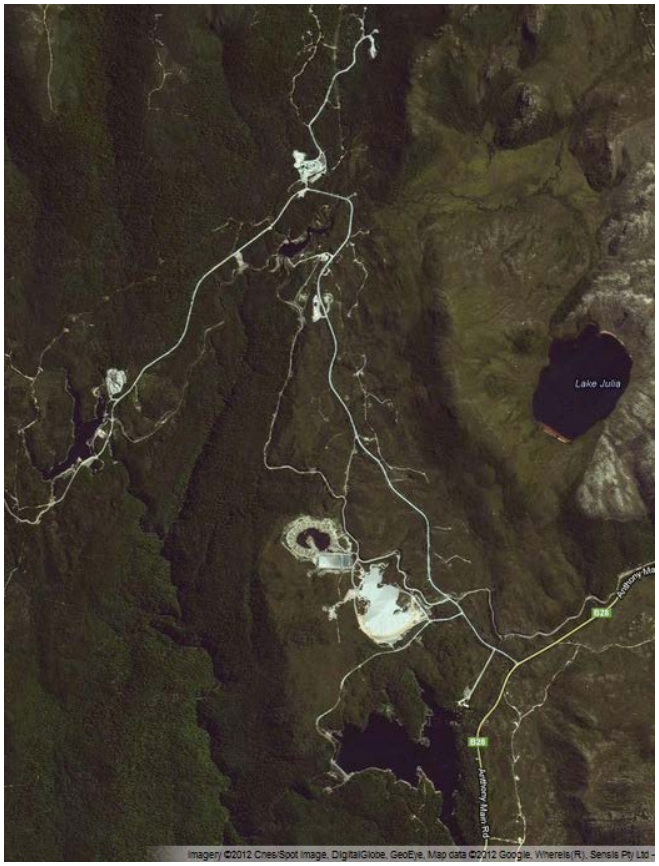
Biomonitoring of streams associated with Henty Gold Mine

2012 Report
to Henty Gold Mine,
Unity Mining Limited.



PE Davies and Laurie SJ Cook

Freshwater Systems
Aquatic Environmental Consulting Service

82 Waimea Ave, Sandy Bay,
Tasmania Australia 7005

Ph/Fax: 03 62254660
p.e.davies@utas.edu.au

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1. Introduction

The following report details the findings of biological monitoring performed in 2012 in streams associated with the Henty Gold Mine, currently operated by Unity Mining Ltd. This represents the 20th year of biological monitoring of two sites in the upper Henty River and one in a tributary of Newton Creek. This monitoring program involves the annual quantitative and semi-quantitative sampling of benthic macroinvertebrates in riffles (sections of fast, broken or chaotic flow over a cobble substrate), as well as the quantitative sampling of fish. The program samples an upstream ('control') site in the Henty River and two potentially affected ('treatment') sites, one downstream of the point of mine water discharge from the artificial wetland complex in the Henty River, and the other downstream of the leach residue pond emergency spillway overflow into a tributary of Newton Creek. The same set of sites has been sampled each year in the same season (usually autumn-early winter, typically March to early June), with only minor variation (sampling in 2009 was conducted in late May).

This report represents the 2012 annual update of the entire monitoring program from its inception, and has been written so that the reader does not have to refer to previous reports (Davies 1995, Davies and Cook, 1998-2000, 2001-2002, 2003, 2004; Davies et al. 2005, 2006, 2007, 2008, 2009, 2010, 2011).